

SOCIO-ECONOMIC IMPACT OF SMALL FARM PRODUCTIONS: A STUDY OF DISTRICT CHINIOT, PUNJAB, PAKISTAN

Syed Mohsin Raza Naqvi^{1,*}, Ashfaq Ahmad Maann², Izhar Ahmad Khan³, Syed Asif Ali Naqvi² and R. M. Amir³

¹Department of Rural Sociology, University of Agriculture, Faisalabad;²Department of Economics, Government College University, Faisalabad; ³Institute of Agricultural Extension and Rural Development, University of Agriculture, Faisalabad, Pakistan.

*Corresponding author's email: mohsin.raza@uaf.edu.pk

The present study was conducted to examine economic factors affecting level of farm productions in small farmers. The study was quantitative in nature and data was collected from three tehsils of District Chiniot. The total sample sizes were 125 respondents which were farmers having land less than ten acres. Data was collected through interview schedule and descriptive analyses used through SPSS. Results showed that various economic factors were affecting farm productions of small farmer's as expensive fertilizer, lack of financial capital, high level of rural poverty, lack of loan distribution to farmers and indigenous use of machinery because of small farmers can't afford to purchase the heavy machinery.

Keywords: Economic factors, farm productions, small farmers, financial problems

INTRODUCTION

Agriculture is mainstay of Pakistan's economy. It accounts for 20.9 percent to the GDP and more than 43.5 % of the manual labor is betrothed in the agriculture sector. Almost 68 percent of the residents of Pakistan lives in cities and get for their living, straightforwardly or ultimately, through agriculture system like harvest farming, farm animals nurturing, work in agriculture, agriculture contribution supply, shipping of agricultural production to the market. In short agriculture play very constructive role in Pakistan economy but its progress in the country is not up to the standard pace (GOP, 2014-15).

Around 87 percent of the world's small farmers who have less than 2 hectare landholders are living in Asia and Pacific region. Especially, small farmers of Asia are characterized as the main feature of agricultural sector. Where the average size of landholding is not more than around 0.8 hectares in Nepal, 0.5 hectares in Bangladesh, 0.8 hectare in Sri Lanka, 1.4 hectares in India.

Agriculture is not hazard free in Pakistan especially now a day it has been replete with many challenges as attack of pesticides, shortage of electricity, availability of seeds/fertilizers and availability of irrigation water. The previous mentioned challenges are general problems for all farmers irrespective of their landholding and geographic characteristics of area cultivated. But the small farmers in the country are also facing the problem of late adoption as far as technological advancement are concerned which is mainly due to the shortage of financial resources.

The contribution of agriculture in economic advancement of several countries can't be refused. The food security and

sustenance of people living in non-urban area depend on this advancement. In this way, it plays an important role towards progress in lifestyles of the people connected with each other. It is truly demonstrated simply by experts that the agriculture segment supply groundwork for sector along with nonagricultural sectors advancement. This agriculture segment offers uncooked materials for sector and develops effective desire for manufacturing merchandise. This desire and offer cause manufacturing enlargement which often play a role in economic growth (Subramaniam and Reed, 2009). The farming sector is often a significant source of income it provides raw material in addition to prepare agricultural items for exports. So as to preserve large increase within countrywide income, work formation, accomplishing meal security, making certain macroeconomic security and doing away with income inequalities, the speedy increase within the farming sector is vital (Amjad, 2009). The small farmers always facing the financial problems and they are not able to use improved seeds, sufficient fertilizers and modern farm implements in Pakistan. In short, one of the major reasons of low per acre production is due to the pond of agricultural recognition. On the other hand, the availability of credit is necessary for improvement of agriculture production and also gives credit facilities to the poor farmers in their agriculture areas in the specific period (Ahmad 2007; Iqbal *et al.*, 2003). In Pakistan many farmer facing a number of problems due to small farm size mostly farmers of our homeland cultivate their crops with traditional method and the small farmer cannot purchase modern machinery for cultivation. Natural disaster affects the crops badly. Small farmers are mostly unaware about the proper use of modern machinery and government

did not take action to create awareness. Government provides necessary tools and awareness for good cultivation. All these things caused low production of land which directly affects the country condition negatively. Small cultivation area may originate the dependence of small farmers and their families on agriculture with the main focus on production of the staple food for the household's consumption (Hazell *et al.*, 2007). A greater part of little and medium agriculturists got data mostly from collaborators as it was indicated by Abbas *et al.* (2003). In the previous five years the agricultural production of Pakistan has been indicated in mixed trends that resulted into the increased rate of poverty in its rural areas 2002–03. As the population is on the rise the available natural resource are consumed more thus there is found decline in these with the passage of time. Contrarily the demand for food and production of agricultural crops by using these natural resources is increasing in the country. It has turned into challenge to increase production of crops from already declining agriculture sector of the country.

Increase in financial capital of farmers and the major increase was noted in the production of cash crops (Ansari, 2001). FAO denoted the price of land as the determinant of the agricultural production. Credit play very constructive role in the agricultural production. The small farmers can buy the agricultural equipment and machinery through credit for carrying out farm operations (Saboor *et al.*, 2010). However, small farmers are still facing the problem of lack of capital. If there is demand for increase in agricultural productivity then access of small farmers to credit facility will have to be enhanced (Abedullah *et al.*, 2009).

The study was aimed to find out the socio-economic factors affecting the farm production of respondents in the study area and to explore how lack of economic facilities effect on farm production of respondents.

MATERIALS AND METHODS

The present study was conducted to examine socio-economic factors affecting farm productions of small farmers in District Chiniot. Three tehsils of selected district were taken for data collection. Total 125 respondents were taken as sample for this study. One of the non-probability sampling techniques i.e. snow ball sampling was used for the selection of small farmer. Data were collected through interview schedule as literacy rate is proportionately low among this sector of society. The quantitative data were analyzed by using various statistical techniques. The relationship among different variables was examined by using chi-square test. The first part of the questionnaire was specified for the demographic information of the respondents. Demographic information consists of education, age, gender, economic condition, residence, family type, type of house, farm size, average farm size, occupation, problems they face and solution. The next part contained questions about exposure, approach and the practices of the

respondents regarding low agriculture production and the solution of the low production. The collected data were analyzed by using Statistical Package of Social Sciences (SPSS).

RESULTS AND DISCUSSION

The data given in Table 1 revealed that about 98.4% respondents were male and another 1.6% of them were female. Above table revealed that 24.0% of the respondents were in age category that was 21-25 and 14.4% respondents were in age category that are 26-30 and 16.8% were among age category 31-35 and 19.2 respondents were in age category 36-40 and some 8.8% respondents belonged to the age category 41-45 and 12.8% respondents are laying in age category 46-50. Only 4.0% respondents were in age group of above 50.

Table 1: Distribution of the respondents according to gender

Gender	Frequency	Percentage
Male	123	98.4
Female	2	1.6
Total	125	100.0

Table 2: Distribution of the respondents according to age

Age	Frequency	Percentage
21-25	30	24.0
26-30	18	14.4
31-35	21	16.8
36-40	24	19.2
41-45	11	8.8
46-50	16	12.8
Above	5	4.0
Total	125	100.0

Table 3: Distribution of the respondents according to farm size

Farm size	Frequency	Percentage
1-3	38	30.4
4-6	29	23.2
7-8	30	24.0
9-10	24	19.2
Above	4	3.2
Total	125	100.0

Table 4: Distribution of the respondents according to family size

Family size	Frequency	Percentage
2-3	28	22.4
4-5	43	34.4
6-7	38	30.4
8-9	13	10.4
Above	3	2.4
Total	125	100.0

Table 5: Distribution of the respondents according to education status

Education status	Frequency	Percentage
No education	36	28.8
Primary	26	20.8
Middle	25	20.0
High	27	21.6
Above	11	8.8
Total	125	100.0

Table 6: Distribution of the respondents according to house income

House income	Frequency	Percentage
100000-200000	68	54.4
300000-400000	38	30.4
500000-600000	15	12.0
Above	4	3.2
Total	125	100.0

Table 7: Distribution of the respondents according to crops

Major Crops	Frequency	Percentage
Rice	22	17.6
Wheat	84	67.2
sugar cane	13	10.4
Maize	3	2.4
any other	3	2.4
Total	125	100.0

Table 8: Distribution of the respondents according to number of crops

Number of crops	Frequency	Percentage
1	26	20.8
2	77	61.6
3	17	13.6
4	5	4.0
Total	125	100.0

Above table revealed that 71.2% respondents were married and 18.4% respondents were single and 8.8% respondent were divorced only 1.6% widowed respondents. Above table revealed that majority of respondents 30.4% farm size were 1-3 and other majority of respondents 23.2% have farm size 4-6 acre and 24.0% respondents had 7-8 acre and 19.2% respondents had 9-10 acre land only 3.2% respondent's farm size was above average. Above table revealed that 27.2% respondents were only one owner of land and majority of owners were 2 that are 31.2% respondents and 24.8% respondents were 3 owner of land and 12% respondents are 4 partners of land and 4.8% respondents were more than four owner of their land. Above table revealed that 22.4% family size was 2-3 and majority of family size 34.4% respondents family size was 4-5 and 30.4% respondents family size was 6-7 and 10.4% respondents family size was 8-9 and 2.4% respondents family size was large or above 9 person. Above table revealed that 54.4% respondents annual income was 100000-200000 and 30.4% respondents annual household income was 300000-400000 and 12.0% respondent annual income was 500000-600000 and only 3.2% respondents annual income was above average income. Above table revealed that 41.6% respondents thought that minimum 5-10 acre field size was necessary for cultivation and 25.6% people thought that overage field size was 11-15 acre and 18.4% people thought that average field size was 16-20% and 14.4% respondents thought that maximum 21-25 acre field was essential for cultivation.

Table 9: Distribution of the respondents according to their unawareness about the proper use of fertilizer

Unawareness about the proper use of fertilizer	Frequency	Percent
To greater extent	55	44.0
To some extent	58	46.4
Not at all	12	9.6
Total	125	100.0

Above table revealed that 44.0% people did not aware about the proper use of fertilizer 46.4% people were unaware to some extent and only 9.6% respondent not agreed with this statement

Table 10: Distributions of the respondents according to their poor marketing structure.

Poor marketing structure.	Frequency	Percent
To greater extent	79	63.2
To some extent	45	36.0
Not at all	1	.8
Total	125	100.0

Above table revealed that 63.2% respondents poor marketing structure affected the fertilizer use to greater extent and 36.0% respondent to some extent and 0.8% not agreed at it.

Testing of hypothesis

Table 11: Hypothesis and their relation on the relationship between the socio economic factor and the level of agriculture production.

Socio economic factors	Agricultural Farm Productions			Total
	to greater extent	to some extent	not at all	
to greater extent	60	21	2	83
to some extent	19	19	2	40
not at all	0	1	1	2
Total	79	41	5	125

Chi-square $\chi^2=19.352a$ DF=4 P-value=0.001

Level of significance=0.05 Above table revealed that socio-economic factor like fertilizer, illiteracy, technology, economic condition, government policies, natural disaster and shares of land holding that are the main cause of low production. It reveals that Socio economic factor disrupts the food production and the average income become very low. So our Alternative hypothesis is accepted and null hypothesis is rejected. This study revealed that there is found a strong relationship between socio economic factor and farm production.

Table 12: Hypothesis and their relationship between lack of government interest and the awareness of small farmer regarding their agriculture production.

Awareness of small farmers	Lack of government interest			Total
	to greater extent	to some extent	not at all	
to greater extent	49	21	4	74
to some extent	21	19	4	44
not at all	1	2	4	7
	71	42	12	125

Chi-square $\chi^2=23.725a$ DF=4 P-value=0.000

Level of significance=0.05 Above table revealed that government participation in agriculture is not properly enhanced and farmer wants that government take necessary steps to create awareness among the small farmer. The findings of an investigation focused on the relation between government policies and its effects on agriculture field. It reveals that government launched programs to create awareness among small farmer but government participation is very limited in agriculture sector. These findings showed that strong relation between government launch programs for small farmer and limited participation of government. So our

Alternative hypothesis is accepted and null hypothesis is rejected. So table revealed that participation of government in agriculture sector affects the small farmer output. This finding showed that small farmers are unaware about the advance cultivation methods and low access to purchase the modern tools or machinery of agriculture. The risk of low productivity among small farmer become low if government provide facilities for cultivation and create awareness among small farmer.

CONCLUSION

The higher growth rate for the agriculture sector than performed in the past is imperative for a rapid overall growth of the economy; macroeconomic stability, employment generation, and reduction in rural poverty in Pakistan. It has been concluded that majority of small landholders have no accessibility of the modern facilities like advance technology using of machinery. The finding further revealed that several independent and fertilizer variables effects on the production of small landholders and respondents, which were largely the small farmers, were having low level of education than large farmer. It is strongly recommended that regular training of farmers should be carried out to complement efforts of the extension agents. Inputs should be provided with affordable prices and strong governmental check and balance.

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